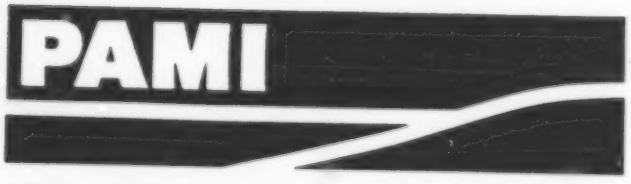
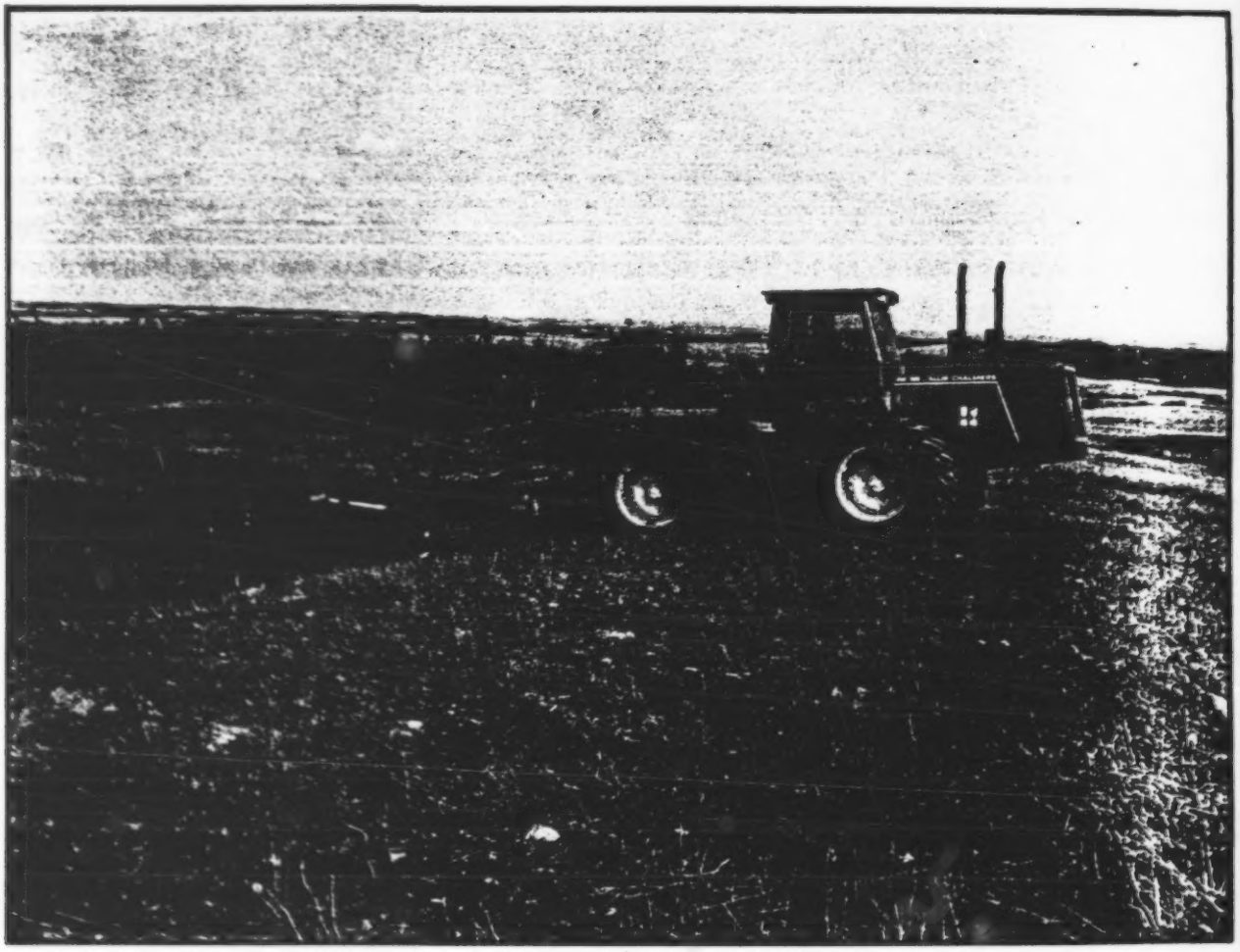
Eleventh Annual Report 1984-1985



PRAIRIE AGRICULTURAL MACHINERY INSTITUTE



THE PRAIRIE AGRICULTURAL MACHINERY INSTITUTE

"to improve the design and aid in the selection and use of agricultural machinery in the prairie provinces"

To achieve this goal, the provinces of Alberta, Manitoba and Saskatchewan established the Prairie Agricultural Machinery Institute as a unique resource to the farmers and agricultural machinery manufacturers of the prairies. Since its inception October 10, 1974, programs to provide for the evaluation and development of agricultural machines, for research into matters concerning agricultural machines and for the extension of information on agricultural machines have been the primary concern of the Machinery Institute.

Honourable
Lorne Hepworth
Minister of Agriculture
Province of Saskatchewan

Honourable
LeRoy Fjordbotten
Minister of Agriculture
Province of Alberta

Honourable
Bill Uruski
Minister of Agriculture
Province of Manitoba

MEMBERS OF COUNCIL

Name

CHAIRMAN
G. Nystuen
Spalding, Saskatchewan

COUNCILLORS
G. Blanchard
Bow Island, Alberta

J. Enns
Oak Bluff, Manitoba

R.S. Forrest
Alberta Agriculture
Edmonton, Alberta

G. Laliberte
University of Manitoba
Winnipeg, Manitoba

T.L. Pringle
Manitoba Dept. of Agriculture
Winnipeg, Manitoba

A. Burghardt
Versatile Noble Cultivators Co.
Nobleford, Alberta

L. Masur
Nokomis, Saskatchewan

B. Nicholson
Shoal Lake, Manitoba

M. Westby
Watrous, Saskatchewan

SECRETARY
L.G. Smith, Director
Prairie Agricultural Machinery Institute
Humboldt, Saskatchewan

PRAIRIE AGRICULTURAL MACHINERY INSTITUTE

LETTER OF TRANSMITTAL

Regina, Saskatchewan
March 1985

His Honour F. W. Johnson, Q.C.
Lieutenant Governor
Province of Saskatchewan

May It Please Your Honour:

Pursuant to Section 19(1) and (2) of the Prairie Agricultural Machinery Institute Act, R.S.S. 1978. I respectfully submit, for your consideration, the Annual report of the Prairie Agricultural Machinery Institute for the fiscal year ending March 31, 1985.

Your obedient servant,

Lorne H. Hepworth
Minister of Agriculture
Province of Saskatchewan

LETTER OF TRANSMITTAL

Humboldt, Saskatchewan
March 1985

Honourable Lorne Hepworth
Minister of Agriculture
Province of Saskatchewan

Honourable LeRoy Fjordbotten
Minister of Agriculture
Province of Alberta

Honourable Bill Uruski
Minister of Agriculture
Province of Manitoba

Sirs:

It is my honour to present the Annual Report and audited financial statements of the Prairie Agricultural Machinery Institute for the fiscal year ending March 31, 1985.

Respectfully submitted,

G. Nystuen, Chairman
Prairie Agricultural
Machinery Institute Council

PRAIRIE AGRICULTURAL MACHINERY INSTITUTE

Humboldt, Saskatchewan
March, 1985

Mr. G. Nystuen, Chairman
Prairie Agricultural Machinery
Institute
SPALDING, Saskatchewan

Dear Sir:

It is my honour to submit the Eleventh Annual report of the Prairie Agricultural Machinery Institute for the year ending March 31, 1985.

Early in the year, the Institute engaged the consulting firm of Touche Ross and Partners to undertake a comprehensive review of the services offered by the Institute and to make recommendations for any changes in services which would better meet the needs of agriculture.

The response from farmers, farm machinery manufacturers and agricultural researchers was highly supportive of the quality of work performed by the Institute. Recommendations for some minor changes to improve the services will hopefully form part of a new long term agreement with the three Prairie Provinces.

We look forward to renewal of this agreement and formulation of the long range objectives of the Institute.

Respectfully submitted,

Lorne G. Smith,
Director

PROGRAMS AND OBJECTIVES

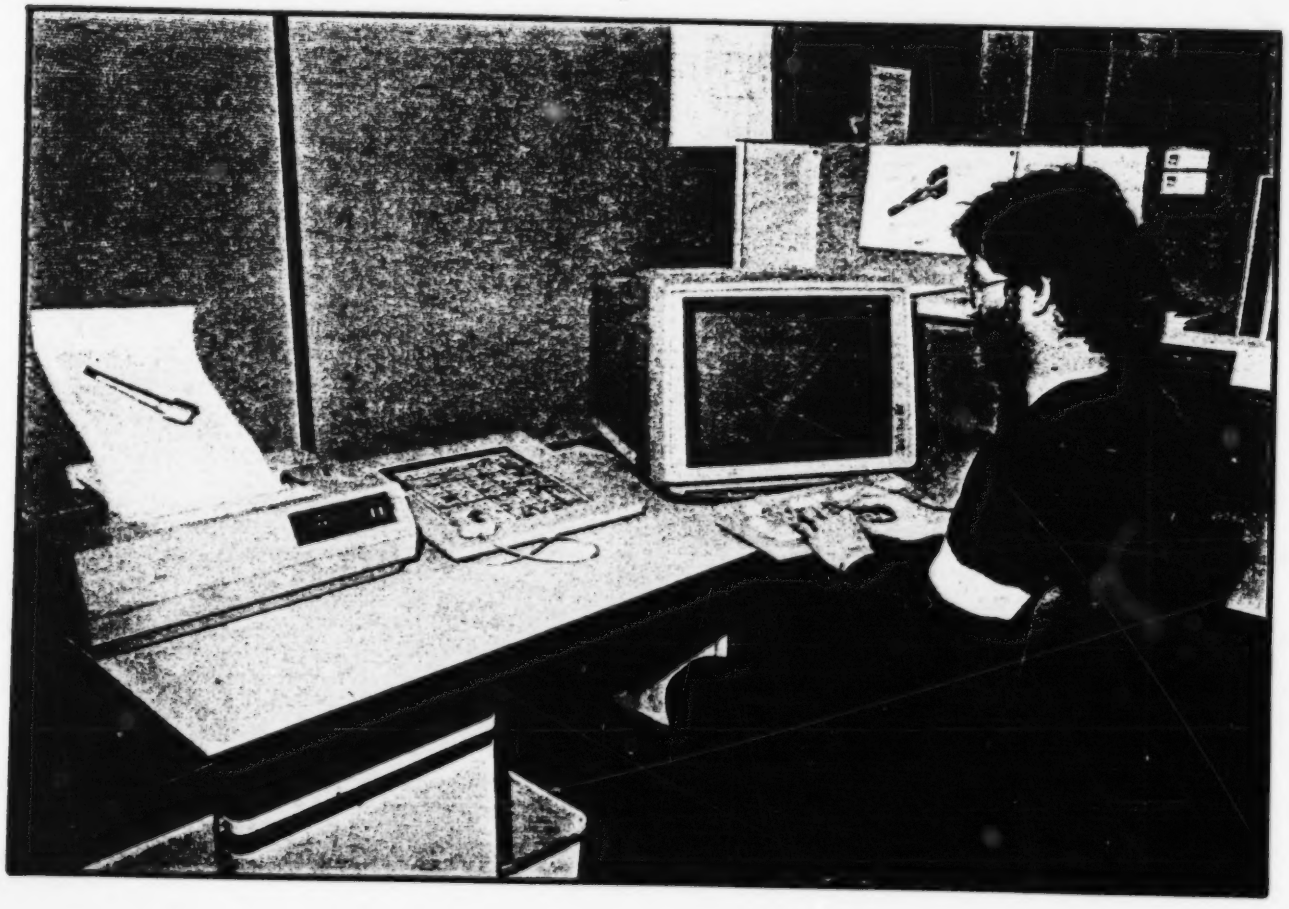
The general terms of reference for the Institute are provided in The Prairie Agricultural Machinery Institute Act which was passed by the Saskatachewan Legislature in 1974. Under this act, an agreement between the Ministers of Agriculture for Saskatchewan, Alberta and Manitoba provides for the Institute to be supported and operated as a co-operative venture of these provinces. The Prairie Agricultural Machinery Institute Council has the power to define programs and guide the activities of the Institute, within the terms of the act.

The purpose of the Institute is "to improve the design and aid in the selection and use of agricultural machinery in the prairie provinces." Three stations are located at Humboldt, Saskatchewan; Lethbridge, Alberta; and Portage la Prairie, Manitoba. Each carries out programs of special interest to farmers and manufacturers in its province.

PROGRAMS

Four distinct programs are defined and carried out by the Institute, as follows:

1. Development Program — aimed at assisting industry in developing and improving machines for prairie agriculture.
2. Evaluation Program — aimed at evaluating the performance of agricultural machinery in prairie conditions.
3. Research Program — aimed at ensuring that priority research projects, relative to agricultural machinery, are carried out to suit changing agricultural practices and economic conditions.
4. Extension Program — aimed at providing farmers with information to assist in the intelligent purchase, and safe and efficient operation of agricultural machinery.



DEVELOPMENT PROGRAM

Under this program, assistance is provided to manufacturers in developing and improving machines to suit prairie needs. This may take the form of prototype or preproduction testing, design modification, or assistance in developing new machine concepts.

Some of the services available to manufacturers include the use of mobile field laboratories and specialized measuring equipment, durability testing of components or complete machine assemblies, experimental stress analysis, design of electronic control systems, standards compliance testing, sound level measurement, high speed photography, technical information searches and finite element analysis.

Every effort is made to assist prairie manufacturers who request immediate help to remedy urgent problems. Fee for service arrangements for development work are negotiated between the manufacturer and the Institute. A confidential report is provided to the manufacturer at the conclusion of each project.

EVALUATION PROGRAM

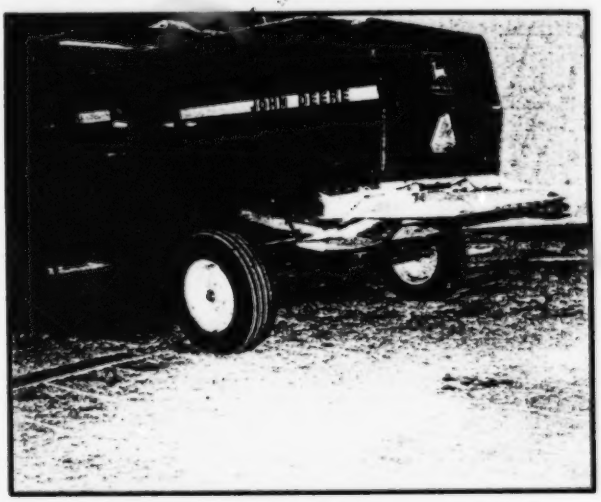
The Institute carries out functional evaluation of agricultural machines to determine performance characteristics, workrates, power requirements, safety aspects and general suitability for prairie agriculture.

Priorities for selection of test machines are based on the availability of performance data, the uniqueness of the machine for prairie agriculture and the frequency of information requests.

Field work is performed in selected locations throughout the prairie provinces. Results of evaluation work carried out by the Institute are made available to the public.

RESEARCH PROGRAM

The Institute conducts selected timely research projects on machinery related subjects, usually in co-operation with universities, research institutions, test agencies and interested manufacturers. These projects are aimed at determining design parameters, assessing new machinery for modifying cultural practices, developing mechanization to suit new crops, developing evaluation procedures and developing safety and performance standards.



EXTENSION PROGRAM

Extension involves the dissemination of information obtained through other programs, to farmers, manufacturers, extension agencies and other interested groups and individuals.

The main extension vehicles are evaluation reports and "Gleanings" published and distributed to the public by the Institute. "Machinery Institute News" is circulated to extension agencies and others, to keep them informed on PAMI activities. Staff are also involved in short courses, meetings, tours, radio and television interviews, news releases, trade fairs and have membership on many external committees.

The extension program also involves preparation of movie and slide presentations on programs and individual projects for use by Institute and other extension agency personnel. Exhibits are also prepared for use at various functions.

Selected extension projects, involving assembly and publication of information from various sources, are carried out as indicated by extension activities and information requests.

PROGRESS DURING 1984-85

ACTIVITIES AT THE HUMBOLDT STATION

— G.E. Frehlich, Station Manager

EVALUATION PROGRAM

Evaluation reports were completed on two combines, two windrowers, three combine straw and chaff spreader attachments, two windrower stabilizer attachments, two intermediate cultivators, a tractor performance monitor, and a unique rotary flex weeder. All the reports were mailed to our subscribers before the season in which the machine is normally used.

Two of the machines tested this year were prototype machines. The reports on these machines were available to the farmers the same year they were introduced to the market. This benefits the farmer as well as the manufacturer, and adds more credibility to the Institute's evaluation program. The Institute is considering ways to encourage more manufacturers to provide their prototype machines for evaluation before they are put on the market.

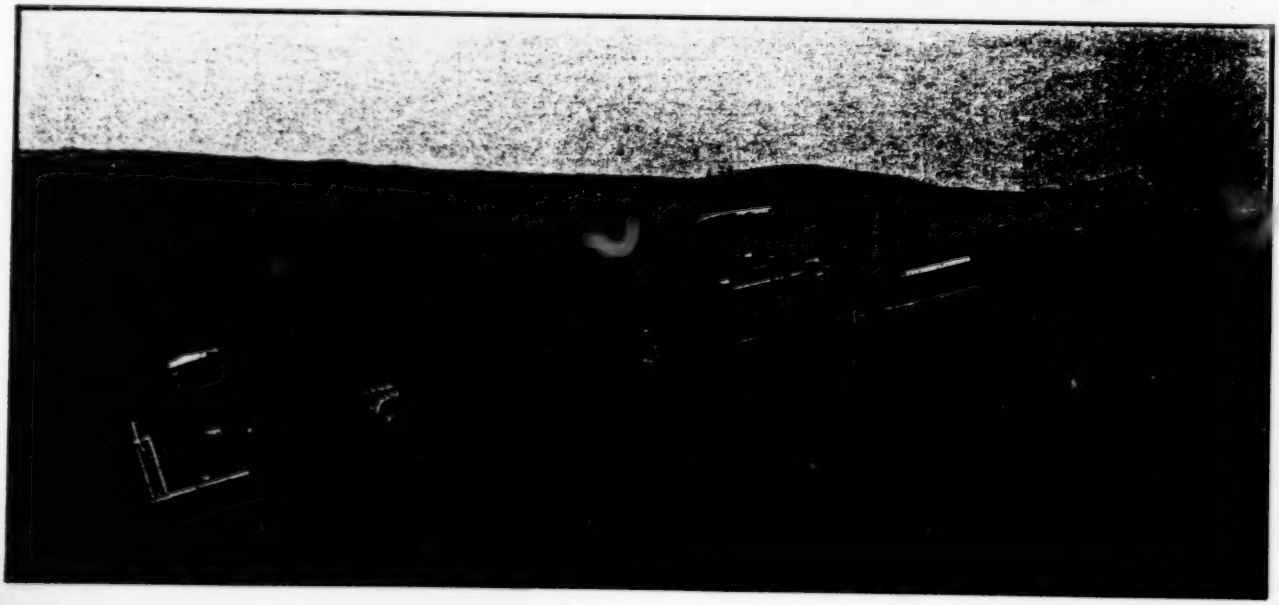
DEVELOPMENT PROGRAM

In 1984-85, the Humboldt station completed sixteen development projects with twelve manufacturers for a total revenue of $117,000.00. In addition, technical advice was given to numerous manufacturers interested in developing or testing new products.

The development projects have included performance testing of a prototype windrower and prototype combine, durability testing of several cultivator shank mechanisms, performance testing of a prototype heat exchanger, strength testing of several twines, performance testing of natural air distribution systems for hopper bottom and flat bottom bins, and high-speed filming of a wild rice harvester.

Over the past year, the Humboldt station has strongly promoted the Institute's development services to farm machinery manufacturers and related manufacturing organizations. A complete list of all available grants and assistance from both the federal and provincial governments, has been prepared and made available to the manufacturers. Response from those contacted has been excellent.

In early 1985, the Humboldt station obtained a CADD work station through a program operated by the Saskatchewan Research Council in Saskatoon. Two of the Humboldt station staff are presently being trained to use the system. The CADD station is located at the Institute to provide ready access to surrounding agricultural machinery manufacturers. By providing this access, local manufacturers will have an opportunity to become familiar with the system to determine if it has applications for their company. The Institute will provide training for operating the system and if requested, will assist manufacturers in analyzing their structural designs.



EXTENSION PROGRAM

The Institute places great emphasis on its extension program and realizes the importance of getting good timely information to the farmer on machinery performance, operation, and adjustment.

Over the past year, the Institute staff in Humboldt have been in direct contact with over 11,000 farmers. Twenty-six clinics on planting equipment, combines, and grain drying were conducted throughout the province. Over 1,500 farmers attended these clinics. In addition to the clinics, the Institute was represented at several major Saskatchewan shows. Some of these included the Mexabition in Saskatoon, the Agribition and Western Canada Farm Progress Show in Regina, and the Annual PIMA Conference held this year in Saskatoon.

Thirteen newspaper articles were completed and mailed to the media. Six TV interviews and twelve radio interviews were conducted. In addition, two displays along with promotional material were prepared and used in the extension activities.

The Institute continues to maintain a high profile both at home and abroad. Numerous tours were conducted for groups from Australia, South Africa, France, China, East and West Germany, Brazil, and the United States. In addition, Humboldt staff presented papers on **Tillage Power Requirements** at the summer ASAE meeting and **Heated Air Grain Dryer Performance** at the annual CSAE meeting.

RESEARCH PROGRAM

Several research projects initiated last year were continued in 1984-85. These included tests to determine: the benefits that can be obtained from combination drying of grain; the increase in combine efficiency that can be obtained by reducing the amount of straw passing through the combine when harvesting wheat and barley; and the effect of grain moisture content, grain variety, frost, and rewetting, on grain drying rates and grain quality.

In addition, several new projects were initiated. These included tests to determine: a procedure to prevent overdrying of grain when natural air drying; distribution system configurations to provide optimum drying performance in natural air drying bins; and the cultivator shank force required for sweeps, chisel points, and deep banding knives. Several in-house research projects were also conducted to assist in verifying and developing test procedures.

ACTIVITIES AT LETHBRIDGE STATION

— E.H. Wiens, Station Manager

EVALUATION PROGRAM

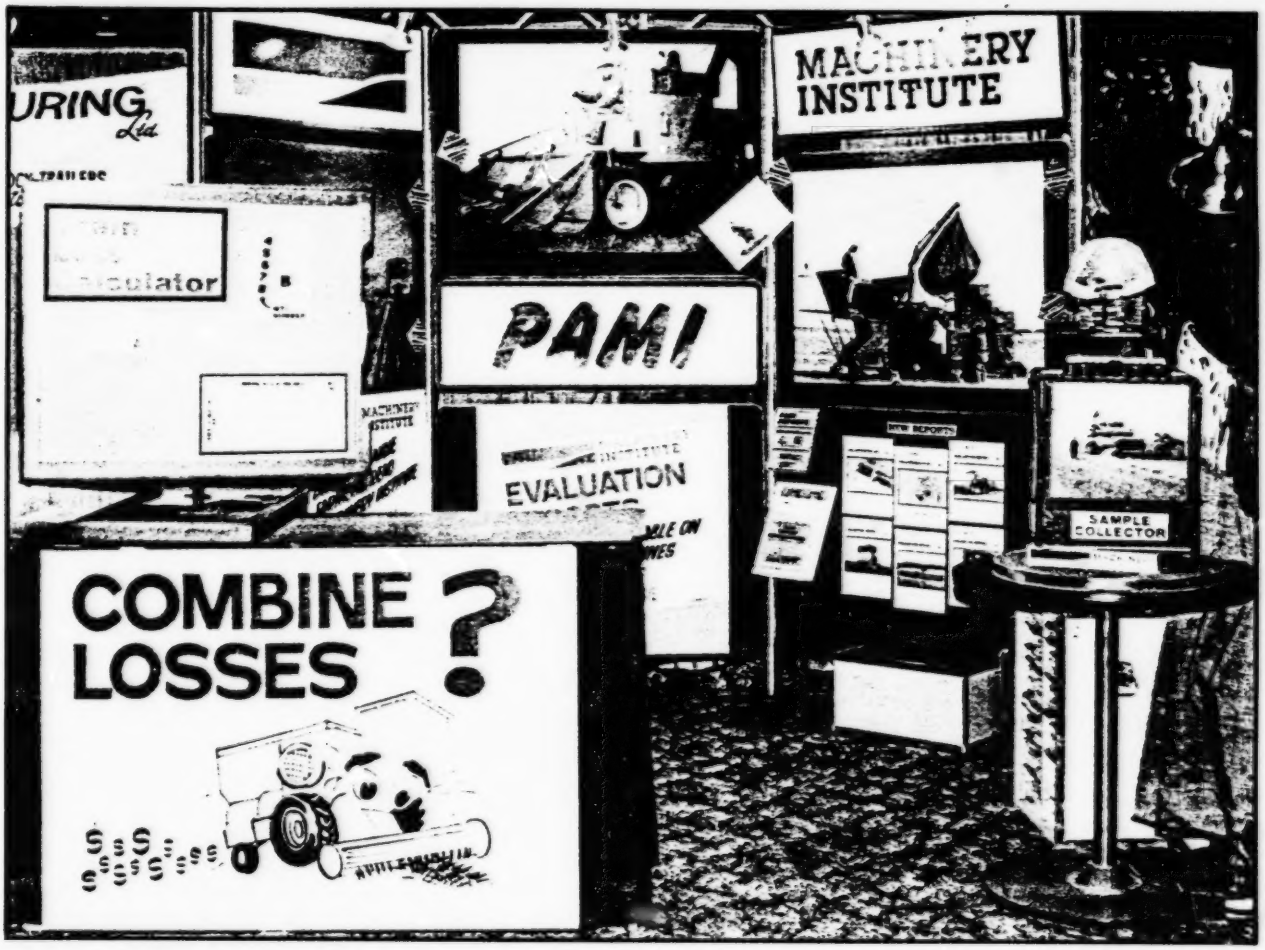
Evaluations were completed on sixteen grain aeration fans, one centre pivot irrigation system, two pneumatic grain conveyors, one field sprayer, spinning disc rotary sprayer nozzles, nine livestock building ventilation fans and one air seeder. Work continued for a second year on two automatic tillage depth controllers, two granular herbicide applicators and a chemical injector for injecting chemical into a sprayer's plumbing system at the pump, thereby eliminating the need for in-tank mixing. Work was also commenced on the evaluation of seven grain moisture meters. Additional projects initiated were the continued evaluation of livestock building ventilation fans and grain aeration fans, four seeding drills, one air seeder and a shrouded sprayer boom.

DEVELOPMENT PROGRAM

Activity in the development program was at an all time high, with considerable manufacturer interest for assistance in this area. A total of twenty seven separate projects were undertaken throughout the year. All projects were conducted on behalf of prairie province manufacturers or prairie based organizations. Projects included fourteen separate projects, using the fan testing facility located at Lethbridge, to develop and improve fans and fan performance for three clients. Two projects were related to alternate energy sources including power measurement of a windmill and adapting the use of compressed natural gas as a fuel for agricultural equipment. Two projects involved assisting local manufacturers in the development of cultivator shanks and shank holders. Another project was the development of performance curves for a drainage pump. A prototype pneumatic grain conveyor was evaluated for a foreign manufacturer to assess its performance in prairie conditions. Calibration curves and distribution patterns were established for a prototype grain drill, as well as for a prototype air seeder. Draft comparisons of various tillage tools were determined for a local manufacturer developing a new tillage concept. Test and design assistance were provided to a local sprayer manufacturer in the design and development of a new concept in sprayers. Two cooperative projects were undertaken with government organizations; one entailed making draft measurements on minimum tillage seeding equipment for the Agriculture Canada Research Station at Lethbridge, the second was a project assisting Alberta Agriculture in the calibration of a plot seeder and fertilizer applicator.

EXTENSION ACTIVITIES

Extension work continued to receive high priority at the Lethbridge station. Through close personal contact with Alberta Agriculture's extension division, more than twenty farmer meetings involving close to 2500 farmers were organized and attended by PAMI staff. In addition to these, several fertilizer and chemical companies, machinery manufacturers, and commodity groups invited the extension staff to make presenta-



tions at eight different conventions or seminars throughout western Canada, exposing more than 1500 people to PAMI evaluation results.

The extension staff maintained a high profile at numerous weed fairs, sprayer clinics, trade shows and machinery clinics. Thirteen such events were attended during 1984-85 resulting in exposure to approximately 200,000 people. A total of 147 people toured the facilities at Lethbridge during the year, including groups from Europe, Australia, USA and several Alberta colleges, universities and government offices.

Lethbridge has enjoyed a good relationship with the media throughout Alberta. Four television shows and nineteen radio interviews were conducted throughout the year. At least ten feature articles were printed in newspapers and magazines related to information from the Lethbridge station. Nine news releases were prepared and sent to the news media, resulting in hundreds of news articles being printed throughout the province.

Further work involved the preparation of up-to-date 16 mm films on sprayers and fan testing. Scripts and film footage are presently being prepared for release of these audio-visual productions.

RESEARCH PROGRAM

The major research project undertaken was a joint venture with the Crop Protection Branch of Alberta Agriculture. The project involved extensive field scale plots to study the effect on weed control of applying herbicides at reduced water and chemical rates. One chemical was applied using four different application devices, at two different application rates and three different chemical rates. It is anticipated this joint project will be ongoing for several years.

ACTIVITIES AT THE PORTAGE STATION

— G.M. Omichinski, Station Manager

EVALUATION PROGRAM

The Portage Station had a busy year, completing former evaluation priorities, continuing work in current priorities and setting up for newly established priorities. Evaluation reports were completed and distributed for thirteen machines: four row-crop planters; four PTO standby alternators, two drill fills, three grain augers. At year end reports were under preparation for two grain cleaners, two zero-till drills, and one auger safety device. Late in the year, the Portage Station was assigned the priority task of evaluating haying equipment. Evaluation programs were initiated for mower conditioners, round balers, round bale movers, and front-end loader attachments for handling round bales. Additional machine evaluations were initiated in the area of zero-till planting, portable pneumatic grain handling, grain cleaners, and grain augers.

DEVELOPMENT PROGRAM

Development work at the Portage Station expanded significantly as compared to previous years, with a total of $162,000.00 in contract services. Major contracts with Agriculture Canada (AERD) were secured, concerning the working characteristics and limitations of an eccentric grain cleaner, and the functional and agronomic evaluation of three types of zero-till drills. With the latter, functional evaluations were completed and the preparation of reports was initiated. Agronomic studies under subcontract to the department of Plant Sciences of the University of Manitoba were initiated and will continue for an additional two seeding seasons.

The installation of facilities to conduct vibration and cyclic load testing were completed. A total of four development contracts under the sponsorship of manufacturers were completed and a fifth was initiated. These projects included a study of field vibration response of a sprayer boom, durability evaluation of a windrow pick-up and sprayer boom, and field simulation studies for a blade weeder standard.

Other development projects undertaken by the staff of the Portage Station, under the sponsorship of manufacturers, were the following: the evaluation of a tractor rollover protective structure; a measurement of vehicle ride vibration for large tractors; testing hub assemblies for a straw chopper; the design, development and prototype fabrication of two drill markers; the testing of an alternate solenoid control valve for a drill fill and investigation into the operating characteristics of a drill fill.

EXTENSION PROGRAM

The highlight of the extension program was an Open House hosted on October 17th and 18th. In excess of 300 visitors were received throughout the two days. The work of the Institute was presented through various displays, speakers, and video presentations. In addition, the event facilitated a number of productive meetings between suppliers, manufacturers, and foreign guests. A similar event is planned on a biannual basis.

Other extension events of note were the attendance at annual weed fairs, participation in the Farm Progress Show, the construction of a large scale model demonstrating the phenomenom of the equal angle hitch in PTO performance, a gleaning publication in the operation and adjustment of forage harvesters, and attendance at chemical plot tours with the extension trailer.

RESEARCH PROJECTS

A research project was undertaken to support an international effort to provide test data for the prediction of tractor field performance. A four wheel drive and a two wheel drive tractor were run in stubble and broken stubble conditions under various loads. Wheel slip versus drawbar load were recorded and soil properties were measured. This information was forwarded to Dr. M. J. Dwyer of NIAE, England, where along with similar data from other countries, a paper on the subject of predicting tractor performance was prepared.

AUDITOR'S REPORT

To the Members of the Legislative Assembly,
Province of Saskatchewan

I have examined the statement of financial position of the Prairie Agricultural Machinery Institute as at March 31, 1985, and the statement of revenue and expenditure and fund balance for the year then ended. My examination was made in accordance with generally accepted auditing standards, and accordingly included such tests and other procedures as I considered necessary in the circumstances.

In my opinion, these financial statements present fairly the financial position of the Priaire Agricultural Machinery Institute as at March 31, 1985, and the results of its operations for the year then ended in accordance with the disclosed basis of accounting applied on a basis consistent with that of the preceding year.

Regina, Saskatchewan
May 9, 1985

W.G. Lutz, F.C.A.,
Provincial Auditor

PRAIRIE AGRICULTURAL MACHINERY INSTITUTE

Statement 1 — **STATEMENT OF FINANCIAL POSITION**

March 31, 1985
(with comparative figures at March 31, 1984)

ASSETS	1985	1984
Current:		
Bank	$ 33,124	$ 160,359
Short term investments, at cost	796,040	747,214
Accounts receivable	165,491	107,512
Travel advances	4,520	4,760
Prepaid expenses	20,340	20,533
	1,019,515	1,040,378
Fixed: at cost		
Assets under capital leases (Note 4)	189,049	189,049
Buildings	2,672,488	2,659,377
Equipment — for evaluation	95,900	90,075
Equipment	1,703,858	1,614,191
Land and improvements	362,207	361,457
Furniture	290,387	280,658
Vehicles	250,147	234,946
Reference material	12,970	12,970
	5,577,006	5,442,723
	$6,596,521	$6,483,101

LIABILITIES AND FUND BALANCE	1985	1984
Current Liabilities:		
Accounts payable	$ 142,524	$ 108,944
Unearned subscription income	55,685	59,957
Obligations under capital lease	35,773	30,504
	233,982	199,405
Non-Current Liabilities:		
Unearned subscription revenue	98,843	118,263
Less current portion	55,685	59,957
	43,158	58,306
Obligations under capital lease (Note 3)	122,884	153,387
Less current portion	35,773	30,504
	87,111	122,883
Fund Balance:		
Fixed assets (Note 4)	5,454,122	5,289,336
Operating (Statement 2)	778,148	813,171
	6,232,270	6,102,507
	$6,596,521	$6,483,101

(See accompanying notes to the financial statements)

STATEMENT OF REVENUE AND EXPENDITURE AND FUND BALANCE

Statement 2

Year Ended March 31, 1985
(with comparative figures for the 1984 year)

	1985	1984
Revenue: (Note 1)		
Provincial grants		
— Saskatchewan	$1,101,150	$1,181,250
— Alberta	856,450	918,750
— Manitoba	489,400	525,000
	2,447,000	2,625,000
Fee for service	316,910	114,871
Investment income	155,831	101,842
Other income	24,819	13,063
Sale of fixed assets	11,200	24,879
Subscription income	78,715	73,831
Total revenue	3,034,475	2,953,486
Expenditure (Schedule 1)	3,069,498	2,832,518
Excess of revenue over expenditure (expenditure over revenue)	(35,023)	120,968
Fund balance, beginning of year	813,171	692,203
Fund balance, end of year	$778,148	$813,171

(See accompanying notes to the financial statements)

NOTES TO FINANCIAL STATEMENTS

March 31, 1985

1. Significant Accounting Policies

These financial statements have been prepared in accordance with accounting policies that are considered appropriate for organizations of this type. The significant accounting policies are as follows:

Fixed Assets

The acquisitions of fixed assets are financed primarily through grants received from the Provinces of Manitoba, Saskatchewan and Alberta, and are accounted for on a fund accounting basis. In the Statement of Revenue and Expenditure and Fund Balance (Statement 2), all grants are recorded as revenue and the purchase of fixed assets are recorded as an expense. Assets acquired and accounted for as capital leases are expenses as the related principal portion of the obligations under the capital leases are reduced. Accordingly, no provision has been made for depreciation of fixed assets. To maintain accountability for fixed assets, they are recorded as a balance sheet asset with a corresponding entry to either the Fund Balance "Fixed Assets" or "Obligations Under Capital Leases". As the principal portion of the "Obligations Under Capital Leases" are reduced, the related amounts are credited to the Fund Balance "Fixed Assets".

Unearned Subscription Income

Subscription revenue for published reports is taken into an unearned subscription account as received and is amortized to income as the revenue is earned. The portion which relates to future years is shown as unearned subscription income in the Statement of Financial Position.

Fee for Service

Fee for service revenue on research contracts is recognized on the accrual basis to the extent that costs have been incurred but not billed.

Funding

In accordance with an agreement signed by the Provinces of Manitoba, Saskatchewan and Alberta, funding is received in the following proportions:

Manitoba	20%
Saskatchewan	45%
Alberta	35%

The Institute, in accordance with the authority included in O.C. 1800/79, follows the policy of retaining the excess of revenue over expenditure received in the year.

2. Incorporation

The Prairie Agricultural Machinery Institute was established as a body corporate under The Prairie Agricultural Machinery Institute Act, Chapter 2, 1973-74, Revised Statutes of Saskatchewan and is continued under Chapter P-21, Revised Statutes of Saskatchewan, 1978.

The purposes of the Institute include:

a) to test and appraise under actual or simulated working conditions machinery sold or offered or intended for sale;
b) to undertake development work to improve and develop machinery for agricultural use;
c) to publish such reports, pamphlets and bulletins as are consistent with the intent of the Act.

3. Obligations Under Capital Leases

The following is a schedule of the minimum lease payments for several capital leases having implicit interest rates ranging from 13.5% to 16.6% which expire in 1988, together with the present balance of the total obligations under the capital leases:

March 31, 1986	$ 52,846
March 31, 1987	52,846
March 31, 1988	45,651
March 31, 1989	3,240
	154,583
Less: amount representing interest	31,699
	$122,884

4. Fund Balance, Fixed Assets

	1985	1984
Fixed assets, March 31,	$5,577,006	$5,442,723
Less obligations under capital leases	122,884	153,387
Fund balance, fixed assets	$5,454,122	$5,289,336

SCHEDULE OF EXPENDITURE

Schedule 1

Year Ended March 31, 1985
(with comparative figures at March 31, 1984)

	Administration	Testing Equipment	Capital	1985 Total	1984 Total
Advertising and promotion	$ 15,027	$ 15,508	$ —	$ 30,535	$ 35,280
Bad debts	24,544	—	—	24,544	1,198
Building	—	—	13,111	13,111	10,172
Computer services	15,792	6,444	—	22,236	29,447
Contractual services	88,106	29,676	—	117,782	18,636
Employee benefits	14,666	150,567	—	165,233	148,067
Equipment - machinery to be evaluated	—	—	11,585	11,585	2,817
Equipment	—	—	125,093	125,093	131,237
Furniture and fixtures	—	—	9,729	9,729	5,452
Honoraria	7,015	—	—	7,015	7,455
Insurance, licenses and taxes	—	90,275	—	90,275	91,727
Interest expense — leases	—	22,337	—	22,337	26,826
Land improvements	—	—	750	750	254
Printing and binding	11,221	149,423	—	160,644	168,999
Professional and technical services	11,474	225	—	11,699	9,568
Reference material	4,091	5,697	—	9,788	12,097
Rent — building and equipment	—	43,424	—	43,424	49,565
— equipment to be evaluated	—	7,262	—	7,262	11,658
Repairs and maintenance — building and equipment	807	56,773	—	57,580	73,089
Salaries	153,694	1,483,350	—	1,637,044	1,497,217
Shop supplies	367	118,680	—	119,047	121,293
Stationery and office supplies	54,967	47,070	—	102,037	88,680
Telephone and telegraph	18,075	41,893	—	59,968	55,030
Travel and vehicle operations	29,976	101,155	—	131,131	136,422
Utilities	—	58,549	—	58,549	58,373
Vehicles	—	—	31,100	31,100	41,959
	$449,822	$2,428,308	$191,368	$3,069,498	$2,832,518

PRAIRIE AGRICULTURAL MACHINERY INSTITUTE

Head Office:	P.O. Box 1900, Humboldt, Sask., S0K 2A0	(306) 682-2555
Test Stations:	c/o LCC Campus, Lethbridge, Alta., T1K 1L6	(403) 329-1212
	P.O. Box 1060, Portage la Prairie, Man., R1N 3C5	(204) 239-5445
	P.O. Box 1150, Humboldt, Sask., S0K 2A0	(306) 682-5033